

**PENNILABIUM PROBOSCIDEUM** A. S. RAO & JOSEPH—A NEW ORCHID SPECIES FROM K. & J. HILLS, ASSAM, WITH INCIDENTAL FIRST RECORD OF THE GENUS FOR INDIA

*Pennilabium* J. J. Sm. distinguished by its abbreviated few leaved stem and its characteristically 3-lobed lip, with the large lateral lobes combed at the tips, includes 3 malayan species, of which one *P. angraecum* (Ridl.) J. J. Sm. is described as occurring in Thailand also by Seidenfaden & Smitinand. [*The orchids of Thailand IV* (1): 634-635]. The presence of this genus in India too is now established by this discovery. *P. proboscideum* is described from material gathered during part of an intensive exploration undertaken for writing a flora of Nongpoh, a station ( $\pm 600$  m) about midway between Shillong and Gauhati. Our species resembles *P. struthio* Carr. of Malaya differing from it in its glabrous entire sepals; in the sidelobes of lip lobulate and the lobules shortly toothed; in a single large 3-lobed lamella forming the rim of the spur mouth and the ovary glabrous.

***Pennilabium proboscideum*** A. S. Rao & J. Joseph sp. nov.

*Epiphyticum* parvum; radices filiformes, longae; caulis brevis, ca. 1.5 cm suberectus, folia 4-6, carnososa, elliptico-oblonga, bifaria, 3.5-7.5  $\times$  0.8-1.5 cm superiora quidem (uno terminali excepto) progressive longiora, breviter vaginata, contorta et obliqua ad basin, inaequaliter ad apicem biloba, marginibus inaequaliter arcuatis. Inflorescentia spicata, axillaris, longe pedunculata, congesta, una binave in singulis plantis, multo brevior foliis, ab eisque operta, 4-5-flora, pedunculi ad apicem compressi, sulcati inter bracteas; bracteae nonnullae, 1.5 mm longae, ovatae, basales quidem nudae. Flores 15  $\times$  8 mm sessiles, suberecti, longe calcarati; perigonium cremeum purpureo-maculatum; sepala obovata, 5-nervia, integra, maculis purpureis aggregatis; sepalum dorsale paulo longius, rotundum, cuspidatum ad apicem, lateralia vero 7.5  $\times$  3.5 mm marginibus inaequaliter curvatis, paulum obliqua ad basin, obtusa ad apicem, dorsaliter ornata cuspidata minuta recurva; petala 6.5  $\times$  2.0 mm oblanceolata, 3-nervia, obtusa; margine integro in dimidio basali, irregulariter sinuato-crenato in dimidio superiore; labium sessile, 3-lobum; lobus medius 1.5 mm longus, crassus, incurvus, rostro similis, dense papillosus; lobi laterales 6  $\times$  2 mm ad basin curvati et prorsum parallele patentes, alteri oppositus, falcati, irregulariter brevi-lobulati ad apicem, lobulis inaequaliter dentatis; calcar 10

mm longum, 1.5 mm diam., horizontaliter et eminenter protrusum; apice hebetate; calcaris fauce magna et infundibuliformi, marginibus laciniatis in lamellam magnam fissam ad latus columnae; lamellae lobo medio caeteris largiore, paulum incurve; lobis lateralibus auricularibus, lanceolato-obtusis vel subulato-obtusis; columna 1.5 mm lata; rostello 1.5 mm cuspidiformi, in lamellam intruso per aperturam in orificio lamellae; caudicula gracilis, 2 mm longa, conice dilatata ad apicem, supportans pollinia bina subglobosa; ovarium sessile, gracile, 7 mm longum, glabrum; fructus erectus, gracilis, 5 cm longus, triquetrous.

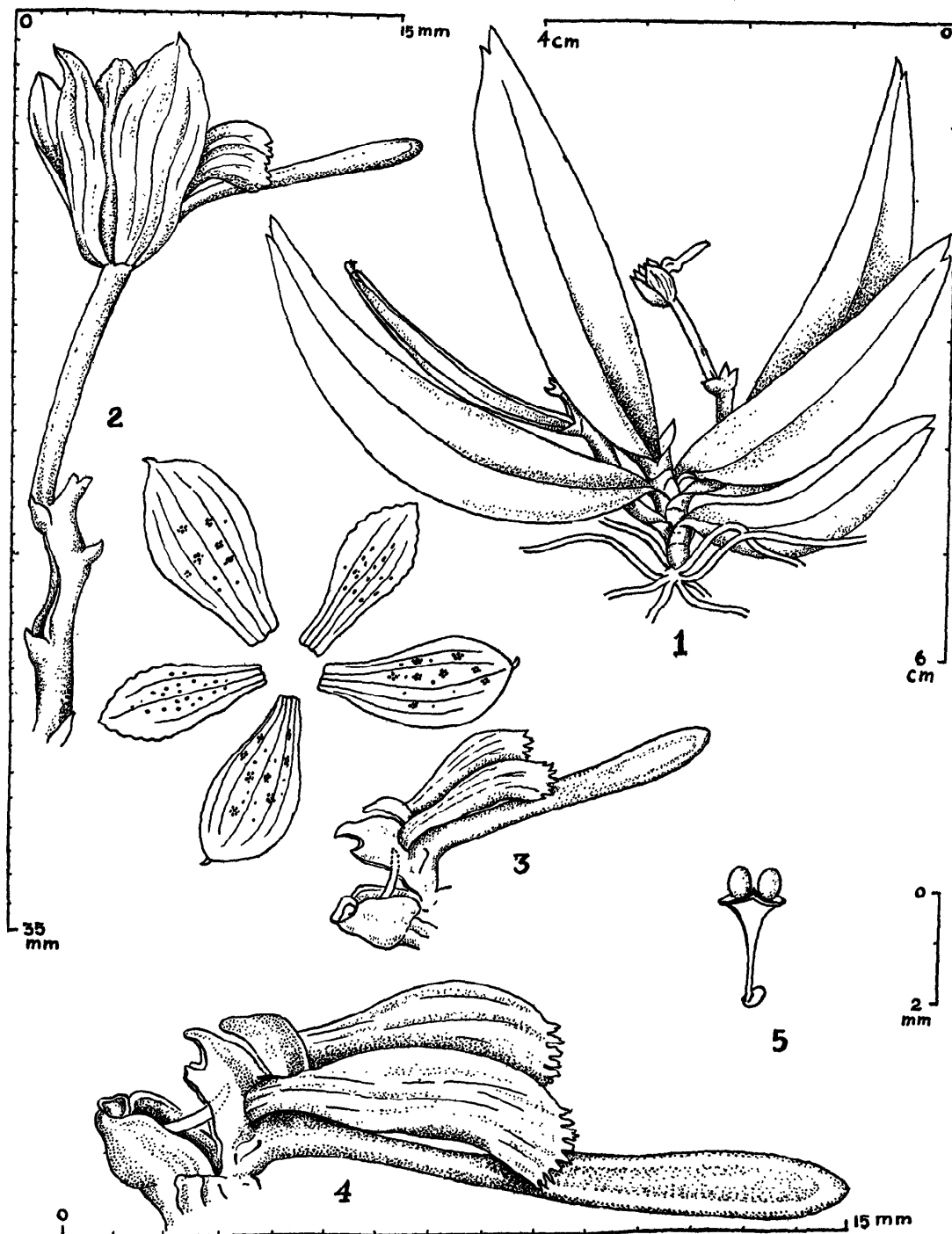
Holotypus A. S. Rao 45622 A, inter Umran et Umsaw lectus prope viam a Gauhati ad Shillong die 23 Julii 1966 et positus in CAL; isotypi, A. S. Rao 45622 B-D, positi in ASSAM.

***Pennilabium proboscideum*** A. S. Rao & J. Joseph sp. nov.

Small epiphyte; root threadlike, long; stem short ca. 1.5 cm, suberect; leaves 4-6, fleshy, elliptic-oblong, bifarious, 3.5-7.5  $\times$  0.8-1.5 cm upper ones (except the terminal) progressively longer, shortly sheathed, twisted and oblique at base, unequally bilobed at apex, the two margins unequally arcuate. Inflorescence a spike, axillary, long peduncled, congested, 1-2 per plant, much shorter than and concealed by the leaves, 4-5-flowered; peduncle compressed at top, grooved between bracts; bracts several, 1.5 mm long, ovate, basal bracts bare. Flowers 15  $\times$  8 mm sessile, suberect, long spurred; perigone purple-dotted creamy-white; sepals obovate, 5-nerved, entire, purple-dots in clusters; dorsal sepal slightly longer, rounded, cuspidate at apex, lateral sepals 7.5  $\times$  3.5 mm with unequally curved margins, a little oblique at base, obtuse at apex, carrying dorsally a subterminal recurved little cusp; petals 6.5  $\times$  2.0 mm oblanceolate, 3-nerved, obtuse; margin entire in the basal half, irregularly sinuate-crenate in the top half; lip sessile, trilobed; midlobe 1.6 mm long, thick, incurved, beak-like, densely papillose; side-lobes 6  $\times$  2 mm bent at base and stretching forward parallelly, facing each other, falcate, irregularly shortly lobulate at apex, each lobule unevenly toothed; spur 10 mm long, 1.5 mm in diameter, horizontally and pronouncedly protruding; apex

blunt; spur mouth large, funnel shaped, the margins flared into a large erect trilobed lamella split

on the column-side; midlobe of lamella larger than the sidelobes, slightly incurved; sidelobes auricular,



*Pennilabium proboscideum* A. S. Rao & J. Joseph sp. nov.

Figs. 1-5: 1. Plant. 2. Spike with a flower. 3. Perigone including lip. 4. Lip. 5. Caudicle with pollinia (A. S. Rao 45622 A).

lanceolate-obtuse or subulate-obtuse; column 1.5 mm high; rostellum 1.5 mm tusk-like, thrust into the

lamella through the slit at the spur orifice; caudicle slender, 2 mm long, conically dilated at apex

carrying the 2 subglobose pollinia; ovary sessile, slender 7 mm long, glabrous, 3-ridged; fruit erect, slender, 5 cm long, 3-ridged.

Holotype—A. S. Rao 45622 A, between Umrang and Umsaw beside the Gauhati-Shillong Road, 23 July 1966 (CAL); Isotypes—A. S. Rao 45622 B-D (ASSAM).

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## NOTES ON SOME NEPAL PLANTS

**Ophioglossum nudicaule** Linn. f.

This species has previously been known from Assam-Jaintia Hills at 1320 m (4,400 ft)—Burkill & Banerji, 10-6-1911; Burma—R. Romain, 7-1883; Malaya Peninsula—L. Wray Jr. and Bundelkhand—Vicary.

My specimen comes from Nagarkot, 1,800 m altit. (ca. 6,000 ft) and was collected in August 1966. This Nepal material completely matches the Bundelkhand material and also the Burma material. Of the sheets in the Central National Herbarium, the sheet from Jaintia Hills has the record of the altitude, thus it will be noticed that there is a great range in the distribution.

Hara in Fl. East. Himal. does not mention the species, thus this is the first record for the species from Nepal.

**Helminthostachys zeylanica** Hk. f.

Banerji 1758 has been collected from Lothar forest area—approximately N. 27° 65': E. 84° 65', at 360 m altit. (1,200 ft) on 17-3-1966. At the time of collection the plants had shed off the sporangia, thus only the bare stalk of the spike was on the plants. The plants were growing on lateritic soil in exposed situations in the mixed forest.

This species is known from Bengal plains to Assam and Cachar, and from Malaya and Ceylon. This gathering from Lothar extends the westwards extension of the species.

**Rubus foliolosus** D. Don

D. Don described this taxa from Wallich's specimen (Wall. 736) which was collected from Nepal, but the precise locality is not known.

A critical study of the recently collected materials from Nepal has been made, and this has brought some interesting points to light. Hooker's description as given in Fl. Brit. Ind. covers a fairly wide range of variations. Also Collett in Fl. Simlensis

p. 162, gives "a prostrate variety with 3-7 much smaller leaflets is distinguished in the Fl. Brit. Ind. as *R. foliolosus* Don".

A search in the Central National Herbarium revealed that Wall. 736 and Scully 8 are placed under *R. foliolosus* D. Don, and also Inayat 21302 from Mashobra, 16-5-1897 (Cal. Herb. No. 146721) placed under *R. lasiocarpa* Sm. I am of the opinion that Inayat 21302 is also *R. foliolosus* D. Don, and not a 'small leaved variety' of *R. lasiocarpa* Sm.

It may be pertinent to mention that Banerji 27, Banerji 1952B and Banerji s.n. are all from different localities and that the species is rather rare in occurrence. Also it is very necessary to give details of my gatherings from Nepal. They are:

- i. Banerji 27, Kathmandu Valley, 1,350 m on 1-4-1948.
- ii. Banerji s.n., Jhangajholi area (app. N. 27° 25': E. 85° 52'), 1,200 m in Feb. 1965.
- iii. Banerji 1952B, Khanigaon (app. N. 27° 35': E. 85° 25'), 1,650 m on 5-2-1967.

I may mention that Banerji 27 is from Kathmandu valley and it is very unlikely that it comes from the same plant wherefrom Wall. 736 or Scully 8 come.

**Rodgersia pinnata** Franch.

On 24th July, 1966 a plant was collected (Banerji 1825) from Puyan forest, altit. 2,400 m from the sides of a small waterfall. There was dense vegetation and the place was infested by leeches, as it was wet and slushy all over due to the spray of water from the waterfall. Identification of the specimen has given a lot of trouble, but at the end it has yielded much interesting information.

In the Central National Herbarium there are 3 sheets—Ribu & Rhomo, 1681, from north of Chakung chu (Sikkim), altit. 3750 m (12,000 ft), 1-11-1910, and one sheet—Searight 21, from Dhui Dhara, Chumbi valley Road Survey, 2,700-3,000 m (9,000-